AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A magnetic carrier for a biological substance, which

(i) has a saturation magnetization of 10-80 $A \cdot m^2/kg$ and a coercive force of 0.80-15.92 kA/m,

(ii) is a ferromagnetic iron oxide particle coated with silica comprising (a) a ferromagnetic iron oxide particle having an aspect ratio of 1.0-1.2 and (b) silica coating the particle in a proportion of 3-100 wt% of the particle, wherein the particle has an average particle size of 0.1-0.5 μm, and

(iii) can bind a nucleic acid.

2. (Currently Amended) ~~A~~ The magnetic carrier ~~for a biological substance~~ of claim 1, which is capable of the following (a) - (c):

(a) dispersing in an amount of at least 20 mg in 1 mL of an aqueous solution of a sample containing a biological substance,

(b) being collected by not less than 90 wt% within 3 seconds in the presence of a magnetic field of 2000-3000 gauss, and

(c) reversibly binding with at least 0.4 μg of the biological substance per 1 mg thereof.

3. (Currently Amended) The magnetic carrier of claim 1, having a saturation magnetization of 30-80 $A \cdot m^2/kg$, a coercive force of 2.39-11.94 kA/m ~~and an average particle size of 0.1-10 μm~~.

4. (Original) The magnetic carrier of claim 3, which is capable of the following (a) - (c):

(a) dispersing in an amount of at least 20 mg in 1 mL of an aqueous solution of a sample containing a biological substance,

(b) being collected by not less than 90 wt% within 3 seconds in the presence of a magnetic field of 2000-3000 gauss, and

(c) reversibly binding with at least 0.4 μg of the biological substance per 1 mg thereof.

5. (Canceled)

6. (Currently Amended) The magnetic carrier of claim ~~5~~ 1, wherein the ferromagnetic iron oxide particle is a magnetite particle.

7. (Canceled)

8. (Currently Amended) The magnetic carrier of claim ~~7~~ 1, wherein the ferromagnetic iron oxide particle is selected from the group consisting of a magnetite particle, a maghemite particle and a manganese zinc ferrite particle.

9. (Currently Amended) A magnetic carrier for nucleic acid comprising a ferromagnetic iron oxide particle and a compound coating the particle, which comprises silicon and aluminum, wherein the carrier has an aspect ratio of 1.0-1.2, an average particle size of 0.1-10 μm, a coercive force of 0.80-15.92 kA/m, and a saturation magnetization of 10-80 $A \cdot m^2/kg$.

10. (Original) The magnetic carrier of claim 9, wherein the ferromagnetic iron oxide particle is selected from the group consisting of a magnetite particle, a maghemite particle, a magnetite maghemite intermediate particle and a manganese zinc ferrite particle.

11. (Previously Presented) The magnetic carrier of claim 9, wherein the compound has an aluminum content of 0.1-40 wt% of the total amount of silicon and aluminum.

12. (Previously Presented) The magnetic carrier of claim 9, wherein the compound is comprised in a proportion of 3-100 wt% of the ferromagnetic iron oxide particle.

13. (Previously Presented) The magnetic carrier of claim 9, wherein the compound is an oxide.

14. (Canceled)

15. (Withdrawn) A method of using a magnetic carrier for binding a biological substance, which method comprises bringing the carrier of claim 1 into contact with the biological substance in an aqueous solution of a sample containing the biological substance.

16. (Withdrawn) The method of claim 15, wherein the biological substance is a nucleic acid.

17. (Withdrawn) A method of isolating a biological substance, which comprises

forming a complex of a biological substance and a magnetic carrier by bringing the magnetic carrier of claim 1 into contact with said biological substance in an aqueous solution of the sample containing the biological substance,

separating the complex from the sample by an external magnetic field, and

eluting the biological substance from the complex.

18. (Withdrawn) The method of claim 17, wherein the biological substance is a nucleic acid.

19. (Withdrawn – Currently Amended) A production method of the magnetic carrier of claim ~~7~~ 1 which comprises adding, for neutralization, an acid to an aqueous suspension comprising a ferromagnetic iron oxide particle having an aspect ratio of 1.0-1.2 dispersed therein and sodium silicate dissolved therein, wherein, in said aqueous suspension, the amount of the ferromagnetic iron oxide is 1-10 wt% of water and the amount of the sodium silicate is 0.3-2 wt% of water, on conversion to SiO_2.

20. (Withdrawn) The production method of claim 19, further comprising a heat treatment of the carrier in an inert gas.

21. (Withdrawn – Currently Amended) A production method of the magnetic carrier of claim ~~5~~ 1, comprising subjecting ferromagnetic iron oxide coated with silica to a heat treatment at 200-800°C.

22. (Withdrawn) The production method of claim 21, wherein the heat treatment is conducted in an atmospheric gas of an inert gas or a reducing gas.

23. (Withdrawn) The production method of claim 21, wherein the ferromagnetic iron oxide particle is synthesized by oxidation in an aqueous solution and applied to a silica coating treatment without drying.

24. (Withdrawn) A production method of the magnetic carrier of 9, which comprises

adding, for neutralization, an acid to an aqueous suspension comprising a ferromagnetic iron oxide particle dispersed therein and silicate and an aluminum salt dissolved therein to allow precipitation of a compound comprising silicon and aluminum,

filtrating the aqueous suspension to give a solid,

drying the solid, and

subjecting the solid to a heat treatment in an inert gas.